

Computer Architecture
sheet (2)

17.a

Move (R5)+, R1
ADD (R5)+, R1
Move R1, -(R5)

17.b

MOV 4(R5), R3 \rightarrow byte size

MOV 16(R5), R3 \rightarrow word size

17.c

ADD #10, R5

□

8.29

Program 1

CLR.L D₀

MOVEAL #List, A₀

Loop MOVE.W (A₀)+, D₁

BGE Loop

ADDQ.L #1, D₀

CMPI #17, D₀

BLT Loop

Move.W -2(A₀), RSLT

Program 2

MOVE.W #\$FFFF, D₀

MOVEAL #List, A₀

Loop LSL.W (A₀)+

BCC Loop

LSL.W #1, D₀

BCS Loop

MOVE.W -2(A₀), RSLT

- BCS: branch carry set.

- they both leaves the 17th negative word in
- the Result (RSLT)

BGE: Branch Greater than or equal

BLT: ~ less than

BCC: Branch carry clear

2

a single Accumulator Processor
means we have a single Register
called Accumulator.